

U.S. PATENT  
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OFFICE

IN THE SPECIFICATION:

On page 1, before paragraph [0001], after the title, please insert the following paragraphs:

RESEARCH AGREEMENTS

The claimed invention was made by, on behalf of, and/or in connection with one or more of the following parties to a joint university-corporation research agreement: Princeton University, The University of Southern California, and Universal Display Corporation. The agreement was in effect on and before the date the claimed invention was made, and the claimed invention was made as a result of activities undertaken within the scope of the agreement.

At pages 22 and 23, please amend paragraph [0051] as follows:

[0051] In another embodiment, the organic enhancement layer may comprise a material having a low dipole moment, wherein a low dipole moment means a dipole moment of less than about 2.0 debyes, such that the device has an unmodified external quantum efficiency of at least about 3%; a highest ~~unoccupied~~ occupied molecular orbital that is not more than 0.8 eV less than the highest ~~unoccupied~~ occupied molecular orbital of the hole transporting material in the adjacent organic layer; and a lifetime of at least about 1000 hours at an initial luminance of about 100 to about 1000 cd/m<sup>2</sup>. In another embodiment, the organic enhancement layer may comprise a material having a highest ~~unoccupied~~ occupied molecular orbital that is at least about 0.8 eV greater than the highest occupied molecular orbital of the hole transporting material in the adjacent first organic layer, such that the device has an unmodified external quantum efficiency of at least about 5% and a lifetime of at least about 1000 hours at an initial luminance of about 100 to about 1000 cd/m<sup>2</sup>. In yet another embodiment, the organic enhancement layer may comprise a material having a dipole moment less than about 2.0 debyes, such that the device has an external quantum efficiency of at least about 5% at from about 100 to about 1000 cd/m<sup>2</sup>. The organic enhancement layer may be in direct contact with the cathode, or there may be a separate organic layer between the organic enhancement layer and the cathode. Other aromatic materials hydrocarbon materials may be used.